What is claimed is:

1. A method of transducing a cell lacking CAR comprising contacting the cell with an expression vector comprising an Ad backbone nucleic acid sequence and polynucleotide encoding a chimeric adenovirus (Ad) fiber polypeptide comprising a tail region, a shaft region and a knob region.

2. The method of claim 1, wherein the tail region comprises an adenovirus serotype 5 (Ad5) tail region, the shaft region comprises an adenovirus serotype 30 (Ad30) shaft region, and the knob region comprises an Ad30 knob region.

3. The method of claim 1, wherein the polynucleotide encoding a chimeric Ad fiber polypeptide encodes SEQ ID NO:1.

4. The method of claim 1, wherein the shaft region comprises amino acids 46-188 of SEQ ID NO:1.

5. The method of claim 1, wherein the knob region comprises amino acids 189-371 of SEQ ID NO:1.

6. The method of claim 1, wherein the tail region comprises amino acids 1-45 of SEQ ID NO:1.

7. The method of claim 1, wherein the polynucleotide encoding a chimeric Ad fiber polypeptide comprises SEQ ID NO:12.

8. The pmethod of claim 7, wherein the polynucleotide comprises nucleotides 1-564 of SEQ ID NO:12.

9.   The method of claim 1, wherein the polynucleotide encoding a chimeric Ad fiber polypeptide comprises nucleotides 1-135 of SEQ ID NO:12.

10.   The method of claim 1, wherein the polynucleotide encodes a chimeric Ad fiber polypeptide comprising amino acids 46-188 of SEQ ID NO:1.

11.   The method of claim 10, wherein the polynucleotide comprises nucleotides 136-564 of SEQ ID NO:12.

12.   The method of claim 1, wherein the tail region is an Ad5 tail region, the shaft region is an Ad30 shaft region comprising amino acids 46-188 of SEQ ID NO:1, and the knob region is an Ad30 knob region.

13.   The method of claim 12, wherein the polynucleotide encoding the shaft region comprises nucleotides 136-564 of SEQ ID NO:12.

14.   The method of claim 1, wherein the expression vector further comprises a nucleotide sequence encoding a therapeutic agent.

15.   The method of claim 1, wherein the polynucleotide encoding a chimeric Ad fiber polypeptide is operably linked to a polynucleotide encoding an amino acid sequence for a therapeutic agent.

16.   The method of claim 1, wherein the cell is a neuronal or epithelial cell.

17.   The method of claim 16, wherein the cell is a human umbilical vein epithelial cell (HUVEC).

18.   The method of claim 1, wherein the cell is a tumor cell.

39

19. The method of claim 18, wherein the tumor cell is from prostate, brain, breast, lung, spleen, kidney, heart, or liver.

20. The method of claim 18, wherein the cell is a neuroprogenitor or stem cell.

21. A method of transducing a cell lacking CAR comprising contacting the cell with an adenovirus particle comprising an Ad backbone nucleic acid sequence and polynucleotide encoding a chimeric Ad fiber polypeptide comprising a tail region, a shaft region and a knob region, wherein at least one of these regions comprises an Ad30 tail region, an Ad30 shaft region and/or an Ad30 knob region.

22. A method of treating a genetic disease or cancer in a mammal comprising administering:

(a) a polypeptide comprising an adenovirus serotype 30 (Ad30) fiber protein and/or a chimeric Ad fiber polypeptide comprising a tail region, a shaft region and a knob region, wherein at least one of these regions comprises an Ad30 tail region, an Ad30 shaft region or an Ad30 knob region; and/or

(b) a polynucleotide comprising a nucleic acid sequence encoding an Ad30 fiber; and/or

(c) an expression vector comprising an Ad backbone nucleic acid sequence and polynucleotide encoding a chimeric Ad fiber polypeptide comprising a tail region, a shaft region and a knob region, wherein at least one of these regions comprises an Ad30 tail region, an Ad30 shaft region or an Ad30 knob region; and/or

(d) an adenovirus particle comprising an expression vector comprising an Ad backbone nucleic acid sequence and polynucleotide encoding a chimeric Ad fiber polypeptide comprising a tail region, a shaft region and a

40

knob region, wherein at least one of these regions comprises an Ad30 tail region, an Ad30 shaft region or an Ad30 knob region.

23.   The method of claim 22, wherein the mammal is human.